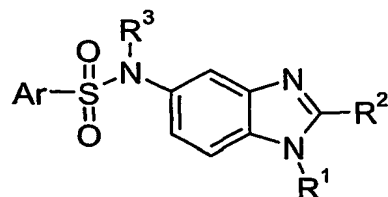


What is claimed is:

1. A compound of Formula I or a pharmaceutically acceptable salt thereof:



I

5 wherein

$R^1$  is selected from  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl,  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{4-8}$ cycloalkenyl, and  $C_{3-6}$ heterocycloalkyl, wherein said  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl,  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{4-8}$ cycloalkenyl, and  $C_{3-6}$ heterocycloalkyl used in defining  $R^1$  is optionally substituted by one or more groups selected from halogen, cyano, nitro, methoxy, ethoxy, methyl, ethyl, hydroxy and amino;

$R^2$  is selected from  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl, and  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl, wherein said  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl, and  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl used in defining  $R^2$  is optionally substituted by one or more groups selected from halogen, methoxy, ethoxy, methyl, ethyl, hydroxy, and amino;

$R^3$  is selected from -H,  $C_{1-6}$ alkyl,  $C_{2-6}$ alkenyl,  $C_{3-6}$ cycloalkyl, and  $C_{3-6}$ cycloalkyl- $C_{1-4}$ alkyl; and

Ar is selected from  $C_{6-10}$ aryl and  $C_{3-6}$ heteroaryl, wherein said  $C_{6-10}$ aryl and  $C_{3-6}$ heteroaryl are optionally substituted with one or more groups selected from  $C_{1-3}$ alkyl,  $C_{1-6}$ alkoxy,  $C_{1-6}$ alkylaminocarbonyl and halogen.

2. A compound as claimed in claim 1, wherein

$R^1$  is selected from  $C_{1-6}$ alkyl,  $C_{2-6}$ alkenyl,  $C_{3-6}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-6}$ cycloalkenyl- $C_{1-4}$ alkyl and  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl, wherein said  $C_{1-6}$ alkyl,  $C_{2-6}$ alkenyl,  $C_{3-6}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-6}$ cycloalkenyl- $C_{1-4}$ alkyl and  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl used in defining  $R^1$  is optionally substituted by one or more groups selected from halogen, methoxy, ethoxy, methyl, hydroxy and amino;

R<sup>2</sup> is selected from C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>3-6</sub>cycloalkyl, C<sub>3-6</sub>cycloalkyl-C<sub>1-4</sub>alkyl, and C<sub>4-6</sub>cycloalkenyl-C<sub>1-4</sub>alkyl, wherein said C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>3-6</sub>cycloalkyl, C<sub>3-6</sub>cycloalkyl-C<sub>1-4</sub>alkyl, and C<sub>4-6</sub>cycloalkenyl-C<sub>1-4</sub>alkyl used in defining R<sup>2</sup> is optionally substituted by one or more groups selected from halogen, methoxy, ethoxy and hydroxy;

R<sup>3</sup> is selected from -H and C<sub>1-3</sub>alkyl; and

Ar is selected from phenyl and C<sub>3-6</sub>heteroaryl, wherein said phenyl and C<sub>3-6</sub>heteroaryl are optionally substituted with one or more groups selected from methyl, methoxy, fluoro, chloro, bromo and iodo.

3. A compound as claimed claim 1,

R<sup>1</sup> is selected from cyclopentyl-methyl, cyclohexyl-methyl, cyclobutyl-methyl, cyclopropylmethyl, 4,4-difluorocyclohexanemethyl, tetrahydropyranyl-methyl, tetrahydrofuranyl-methyl, morpholinyl-methyl, piperdinylethyl, N-methyl-piperdinyl-methyl and piperdinyl-methyl;

R<sup>2</sup> is selected from t-butyl, n-butyl, 2-methyl-2-butyl, isopentyl, 2-hydroxy-propyl, 2-methoxy-2-propyl, 1-methyl-propyl, 1,1-dimethyl-propyl, 1,1-dimethyl-3-buten-1-yl, trifluoromethyl, 1,1-difluoroethyl, 2,2,2-trifluoroethyl, ethyl, and 2-propyl;

R<sup>3</sup> is selected from -H and methyl; and

Ar is selected from phenyl, pyridyl, pyrimidyl, thiazolyl, thienyl, isoxazolyl, imidazolyl, and pyrazolyl, wherein said phenyl, pyridyl, pyrimidyl, thiazolyl, thienyl, isoxazolyl, imidazolyl, and pyrazolyl are optionally substituted with one or more groups selected from methyl, methoxy, fluoro and chloro.

4. A compound as claimed in claim 1, wherein

R<sup>1</sup> is cyclohexyl-methyl, tetrahydropyranylmethyl and 4,4-difluorocyclohexanemethyl;

R<sup>2</sup> is t-butyl and 1,1-difluoroethyl;

R<sup>3</sup> is selected from -H and methyl; and

Ar is selected from phenyl, pyridyl, thiazolyl, thienyl, isoxazolyl, imidazolyl, and pyrazolyl, wherein said phenyl, pyridyl, thiazolyl, thienyl, isoxazolyl, imidazolyl, and pyrazolyl are optionally substituted with one or more methyl groups.

## 5. A compound selected from:

*N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]thiophene-2-sulfonamide;

5 *N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylthiophene-2-sulfonamide;

*N*-(1-Benzyl-2-*tert*-butyl-1*H*-benzimidazol-5-yl)-*N*-methylbenzenesulfonamide;

*N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*,3,5-trimethylisoxazole-4-sulfonamide;

10 *N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*,1,2-trimethyl-1*H*-imidazole-4-sulfonamide;

*N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*,1,3,5-tetramethyl-1*H*-pyrazole-4-sulfonamide;

15 *N*-[2-*tert*-butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]benzene sulphonamide;

*N*-[1-(cyclohexylmethyl)-2-ethyl-1*H*-benzimidazol-5-yl]benzenesulfonamide;

*N*-[1-(cyclohexylmethyl)-2-isopropyl-1*H*-benzimidazol-5-yl]benzene sulphonamide;

20 *N*-[1-(cyclohexylmethyl)-2-(1-methylcyclopropyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;

*N*-[1-(cyclohexylmethyl)-2-(1,1-dimethylpropyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;

*N*-[1-(cyclohexylmethyl)-2-(1,1-dimethyl-3-butenyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;

25 *N*-[1-(cyclohexylmethyl)-2-(1,1-dimethylethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;

*N*-[1-(cyclohexylmethyl)-2-ethyl-1*H*-benzimidazol-5-yl]-*N*-methyl-benzene sulphonamide;

30 *N*-[1-(cyclohexylmethyl)-2-isopropyl-1*H*-benzimidazol-5-yl]-*N*-methyl-benzene sulphonamide;

*N*-[1-(cyclohexylmethyl)-2-(1-methylcyclopropyl)-1*H*-benzimidazol-5-yl]-*N*-methyl-benzenesulfonamide;

- N*-[2-(1,1-dimethylethyl)-1-[(tetrahydro-2*H*-pyran-4-yl)methyl]-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- N*-[2-(1,1-dimethylethyl)-1-[(tetrahydro-2-furanyl)methyl]-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- 5 *N*-[1-(cyclobutylmethyl)-2-(1,1-dimethylethyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- N*-[1-(cyclopropylmethyl)-2-(1,1-dimethylethyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- 10 *N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-2-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-[1-(cyclohexylmethyl)-2-(1-hydroxy-1-methylethyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- 15 *N*-[1-(cyclohexylmethyl)-2-(1-methoxy-1-methylethyl)-1*H*-benzimidazol-5-yl]-*N*-methyl-benzenesulfonamide;
- N*-[1-(cyclohexylmethyl)-2-(1-methoxy-1-methylethyl)-1*H*-benzimidazol-5-yl]-benzenesulfonamide;
- 20 *N*-[2-*tert*-butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*,1-dimethyl-1*H*-imidazole-4-sulfonamide;
- N*-(5-{[[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl](methyl)amino]sulfonyl}-4-methyl-1,3-thiazol-2-yl)acetamide;
- N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylpyridine-3-sulfonamide;
- 25 *N*-[2-*tert*-Butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*,1,2-trimethyl-1*H*-imidazole-5-sulfonamide;
- N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*,1,2-trimethyl-1*H*-imidazole-5-sulfonamide;
- Ethyl 4-{[[2-*tert*-butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl](methyl)amino]sulfonyl}-3,5-dimethyl-1*H*-pyrrole-2-carboxylate;
- 30 *N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-4-(hydroxymethyl)-*N*-methylbenzenesulfonamide;

- N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methyl-4-(1*H*-1,2,3-triazol-1-ylmethyl)benzenesulfonamide;
- N*-[2-*tert*-Butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-4-  
5 {[(2-hydroxyethyl)amino]methyl}-*N*-methylbenzenesulfonamide;
- N*-[2-*tert*-Butyl-1-(cyclopentylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-[2-*tert*-Butyl-1-(2-cyclohexylethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-[1-(1-Benzylpyrrolidin-3-yl)-2-*tert*-butyl-1*H*-benzimidazol-5-yl]-*N*-  
10 methylbenzenesulfonamide;
- N*-{2-*tert*-Butyl-1-[(4,4-difluorocyclohexyl)methyl]-1*H*-benzimidazol-5-yl}-*N*-methylbenzenesulfonamide;
- N*-[2-*tert*-Butyl-1-(pyridin-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- 15 *N*-methyl-*N*-[1-(tetrahydro-2*H*-pyran-4-ylmethyl)-2-(trifluoromethyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;
- N*-[2-(1,1-difluoroethyl)-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-methyl-*N*-[1-(tetrahydro-2*H*-pyran-4-ylmethyl)-2-(2,2,2-trifluoroethyl)-1*H*-  
20 benzimidazol-5-yl]benzenesulfonamide;
- N*-[1-(cyclohexylmethyl)-2-(1-ethylpropyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;
- N*-[1-(cyclohexylmethyl)-2-(1-ethylpropyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- 25 *N*-[2-*tert*-butyl-1-(cyclohexylmethyl)-1*H*-benzimidazol-5-yl]-*N*-ethylbenzenesulfonamide;
- N*-methyl-*N*-[2-(1-methyl-1-pyridin-2-ylethyl)-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;
- N*-[2-(1-cyano-1-methylethyl)-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-  
30 benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;
- N*-methyl-*N*-[2-propyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;

*N*-[2-butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-methylbenzenesulfonamide;

*N*-[2-*tert*-butyl-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]-*N*-ethylbenzenesulfonamide;

- 5 *N*-ethyl-*N*-[2-(1-methoxy-1-methylethyl)-1-(tetrahydro-2*H*-pyran-4-ylmethyl)-1*H*-benzimidazol-5-yl]benzenesulfonamide;  
and pharmaceutically acceptable salts thereof.

6. A compound according to any one of claims 1-5 for use as a medicament.

10

7. The use of a compound according to any one of claims 1-5 in the manufacture of a medicament for the therapy of pain.

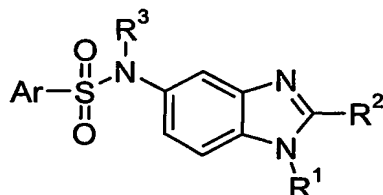
8. The use of a compound according to any one of claims 1-5 in the manufacture  
15 of a medicament for the treatment of anxiety disorders.

9. The use of a compound according to any one of claims 1-5 in the manufacture of a medicament for the treatment of cancer, multiple sclerosis, Parkinson's disease, cancer, Huntington's chorea, Alzheimer's disease, gastrointestinal disorders and  
20 cardiovascular disorders.

10. A pharmaceutical composition comprising a compound according to any one of claims 1-5 and a pharmaceutically acceptable carrier.

25 11. A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5.

12 A method of preparing a compound of Formula I,

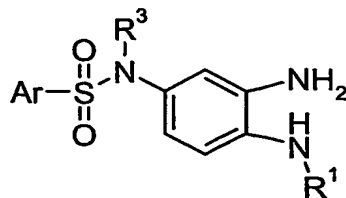


30

**I**

comprising:

reacting a compound of Formula II,



5

**II**

with a compound of  $R^2COX$ , in the presence of a base, such as an alkylamine, and optionally a coupling reagent, such as HATU, EDC;

wherein

X is selected from Cl, Br, F and OH;

10

$R^1$  is selected from  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl,  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{4-8}$ cycloalkenyl, and  $C_{3-6}$ heterocycloalkyl, wherein said  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl,  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl,  $C_{3-6}$ heterocycloalkyl- $C_{1-4}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{4-8}$ cycloalkenyl, and  $C_{3-6}$ heterocycloalkyl used in defining  $R^1$  is optionally substituted by one or more groups selected from halogen, cyano, nitro, methoxy, ethoxy, methyl, ethyl, hydroxy and amino;

15

$R^2$  is selected from  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl, and  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl, wherein said  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl- $C_{1-4}$ alkyl, and  $C_{4-8}$ cycloalkenyl- $C_{1-4}$ alkyl used in defining  $R^2$  is optionally substituted by one or more groups selected from halogen, methoxy, ethoxy, methyl, ethyl, hydroxy, and amino;

20

$R^3$  is selected from -H,  $C_{1-6}$ alkyl,  $C_{2-6}$ alkenyl,  $C_{3-6}$ cycloalkyl, and  $C_{3-6}$ cycloalkyl- $C_{1-4}$ alkyl; and

Ar is selected from  $C_{6-10}$ aryl and  $C_{3-6}$ heteroaryl, wherein said  $C_{6-10}$ aryl and  $C_{3-6}$ heteroaryl are optionally substituted with one or more groups selected from  $C_{1-3}$ alkyl,  $C_{1-6}$ alkoxy,  $C_{1-6}$ alkylaminocarbonyl and halogen.

25